

REMARKS

Claims 1-27 are presently pending. Claims 1-4, 7, 9, 11, 13, 15-17, 19, 20 and 24 have been amended. Claim 27 has been added.

Applicants respectfully request reconsideration of the application in view of the foregoing amendments and the remarks appearing below.

Objection to Claim

The Examiner has objected to claim 11 due to the informality that the last indented limitation that follows indented limitation "g" is denoted "e" instead of "h," as would occur in a forward alphabetic sequence.

Applicants have amended claim 11 to change the second occurrence of "e" as an indented limitation identifier to "h." Therefore, Applicants respectfully request that the Examiner withdraw the objection.

Rejections under 35 U.S.C. § 102

The Examiner has rejected claims 1, 4-7, 13-17, 22, 24 and 25 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,435,002 to Briggs, stating that Briggs discloses all of the elements of these claims. Applicants respectfully disagree.

Briggs discloses a system and method for testing produce for ripeness. The system includes a rotatable sensor mounting (510) that supports a plurality of sensors (22), which may be all of one type or of different types. The sensors disclosed include a sensor for sensing substances that outgas from the produce during ripening, a sensor for detecting chlorophyll fluorescence and a sensor for performing visible or near infra-red spectroscopy, among others. Each piece of produce is moved into a testing location by a conveyor. When each piece of produce is in its testing location, the rotatable sensor mounting rotates so as to move one of the sensors proximate to that piece of produce. A bellows (10) is then pressurized so as to move the sensor closer to or in contact with the piece of produce, depending upon the type of sensor.

Regarding claims 1 and 4-7, each of these claims, as amended, requires among other things the step of moving a cork stopper into a position and the step of determining the presence

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of an analyte that causes cork taint in wine. Briggs does not disclose or even suggest either of these steps. Therefore, Briggs' method cannot anticipate these claims.

Regarding claims 13-17, 22, 24 and 25, each of these claims, as amended, similarly requires, among other things, a plurality of sensors that are each operatively configured for detecting an analyte that causes cork taint. Briggs does not disclose or suggest a sensor of this type, let alone a plurality of such sensors. Therefore, Briggs' system cannot anticipate these claims.

For at least the foregoing reasons, Applicants respectfully request that the Examiner withdraw the present anticipation rejection made in view of the Briggs patent.

Rejection under 35 U.S.C. § 103

The Examiner has rejected claims 2, 3, 9, 10-12, 18-21, 23 and 26 under 35 U.S.C. § 103 as being obvious in view of the Briggs patent, discussed above, and either of WIPO publication no. WO 03/041927 to Moura Bordado et al. or ordinary skill in the art, depending on the claim at issue. More particularly, the Examiner asserts that Briggs discloses all of the limitations of these claims except for: (1) the testing of cork stoppers for the presence of TCA; (2) an apparatus for accomplishing the same and (3) particular features of the apparatus. The Examiner then asserts that it would have been obvious to a person having ordinary skill in the art at the time of the invention, in view of the Moura Bordado et al. publication or ordinary skill in the art, to test cork stoppers and provide a cork stopper testing apparatus as contemplated by the rejected claims. Applicants respectfully disagree.

Moura Bordado et al. disclose a method of treating cork stoppers so as to remove or reduce the level of any TCA that they may contain. Moura Bordado et al. are completely silent on the automated testing of cork stoppers for the presence of TCA.

In rejecting claims 2, 3, 9 and 10, which were originally directed to testing cork stoppers and testing cork stoppers for the presence of TCA and an apparatus therefore, the Examiner asserts that Moura Bordado et al. disclose testing of cork stoppers for the presence of TCA by passing a gas flow over the cork stoppers and moving/turning the stoppers to ensure that the

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stoppers are exposed to the gas flow. This is not correct. Moura Bordado et al. are completely silent on the testing of cork stoppers using these procedures. Rather, Moura Bordado et al. use the procedures the Examiner recites for removing or reducing the level of any TCA that cork stoppers may contain. Consequently, Applicants respectfully assert that the Examiner has failed to show any evidence of suggestion or motivation to combine the references in the manner asserted.

Testing produce for ripeness as disclosed by Briggs is very far removed from the testing of cork stoppers for the presence of TCA. TCA, to the best of Applicants' knowledge, is very different from the substances outgassed by ripening/ripe produce. Consequently, the sensors used in the present invention are much different from the gas sensor disclosed by Briggs, not to mention much different from the optical and other sensors disclosed by Briggs et al. that are used for entirely different tests.

Clearly, all of the limitations of these claims are not taught or suggested by the Briggs and Moura Bordado et al. references. Relative to original claims 2, 3, 9 and 10, the combination does not teach the step of moving a cork stopper to a first position, nor the steps of moving a first sensor operatively configured to detect the presence of TCA and determining via the sensor whether the TCA is present. It is Applicants' position that the only way to combine the references in the manner asserted is to use hindsight of the present claims. However, use of such hindsight to the extent required to make this assertion is impermissible in forming an obviousness-type rejection. Consequently, Applicants assert that originally filed claims 2, 3, 9 and 10 were not obvious in view of the combination of the Briggs and Moura Bordado et al. references.

Applicants note that they have amended independent claims 1, 9 and 13 to include the features that cork stoppers are being tested for a presence of an analyte that causes cork taint in wine. Since these features are not disclosed or even suggested by the cited combination, or any combination of the references of record, these claims as well as claims 2-8, 10 and 14-27 that depend therefrom are allowable over the references of record.

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Regarding claims 11 and 12 as originally filed, the Examiner asserts that these claims are obvious in view of the Briggs patent and ordinary skill in the art, since the step of contacting a plurality of probes with a plurality of leads is merely a variation of well-known switching means. Applicants respectfully disagree.

First, Applicants note that they have amended independent claim 11 to essentially recite that the sensors are placed into communication with sensor electronics substantially only when each sensor is in its sensing position. Applicants assert that Briggs does not disclose or suggest this feature. Briggs is completely silent on the details of the multi-sensor embodiment relative to how the sensors communicate with sensor electronics. In addition, Applicants assert that it would not have been obvious to a person having ordinary skill in the art to perform this step. Further, in connection with original claim 12, Applicants' position is that it is even more difficult to assert that using probes and leads to provide communication only when the sensors are in their sensing position is obvious. Applicants recognize that probe contacts are notoriously used in applications such as semiconductor chip testing and other electrical testing. However, Applicants are not aware of an application in which probes are used to temporarily power, and provide a communication path to, a sensor only during sensing and assert that this application is novel and unobvious. Applicants submit that the Examiner must present further evidence that it is known to use probes and leads in the manner claimed in order to sustain an obviousness-type rejection. Since the Examiner has not yet provided such evidence, Applicants believe that claim 12, and like claims 8 and 24, are not obvious in view of the references of record.

Regarding claims 18-21, 23 and 26, Applicants again note that they have amended independent claim 13 to include a plurality of sensors each operatively configured to sense an analyte that causes cork taint in wine. As discussed above, the Briggs/Moura Bordado et al. combination does not disclose or suggest this feature. Consequently, Applicants assert that claim 13 and claims 14-27 that depend therefrom are allowable.

In addition, Applicants believe that at least dependent claims 20, 21 and 23-26 each include a feature that is not disclosed in the prior art of record, either alone or in combination with one another and/or ordinary skill in the art. Thus, these claims are allowable over the

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references of record for an additional, independent reason. Contrary to the Examiner's position, Applicants assert that nothing in the prior art of record discloses or even suggests moving sensors on a linear conveyor, let alone a flexible web conveyor. It is Applicants' position that the Examiner must show evidence that it would have been obvious to someone having ordinary skill in the art to move sensors in and out of their sensing positions using a linear conveyor as described in claims 20 and 21, as amended, rather than simply asserting that flexible web conveyors would have been obvious since they are well-known for other applications.

Regarding claim 23, Applicants assert that single-use sensors are not obvious in view of the references of record, alone or in combination with one another and/or ordinary skill in the art. Regarding claims 24-26, as amended, Applicants assert that the feature of placing sensors into communication with sensor electronics substantially only when they are in their sensing positions in the manner claimed is obvious in view of the references of record, either alone or in combination with one another and/or ordinary skill in the art for the reasons discussed above relative to claims 11 and 12.

For at least these reasons, Applicants respectfully request that the Examiner withdraw the present obviousness-type rejection of claims 2, 3, 9, 10-12, 18-21, 23 and 26.

Amended Claim 2 and New Claim 27

Amended claim 2 is directed to providing a plurality of batches of cork stoppers and testing each and every cork stopper in the plurality of batches using the automated analyte detection steps of claim 1. Presently, batches of cork stoppers are tested for the presence of analytes that cause cork taint in wine using statistical methods. That is, only a small portion of the stoppers are tested. Typically, this involves random testing of a few stoppers, the "test stoppers," from each batch. The test stoppers are then relatively painstakingly tested using trained human sniffers or involved chemical analyses, such as gas chromatography or mass spectroscopy.

These techniques have been used in the wine industry for many years, despite the fact that this conventional testing still results in at least 1-2% of bottled wine affected by cork taint. Consequently, there has been a long-felt need for a scheme for testing cork stoppers that reduces the incidence of cork taint. The automated cork stopper testing scheme of the present invention fills this long-felt need by providing a testing apparatus capable of testing each and every cork stopper used in bottled wine, rather than just testing small samples of stoppers selected at random from batches of stoppers. The subject matter of amended claim 2 is patentable over the references of record for at least the invention thereof satisfying this long-felt need.

New claim 27 is directed to the sensors of the apparatus of claim 13 being operatively configured to sense TCA. Similar to the discussion above relative to claims 3 and 10, it is Applicants' position that the references of record do not disclose or suggest, alone or in combination with one another and/or ordinary skill in the art the claimed apparatus having TCA sensors. Therefore, new claim 27 is patentable over the references of record.

CONCLUSION

In view of the foregoing, Applicants submit that claims 1-27, as amended, are in condition for allowance. Therefore, prompt issuance of a Notice of Allowance is respectfully solicited. If any issues remain, the Examiner is encouraged to call the undersigned attorney at the number listed below.

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Respectfully submitted,

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